REPORT: FE-03-97

RAILROAD: Norfolk Southern Railroad (NS)

LOCATION: Macon, Georgia

DATE, TIME: Jan. 19, 1997 - 6:40 a.m., EST

PROBABLE CAUSE: The Carman did not remain clear of moving equipment.

FATALLY INJURED EMPLOYEE:

Craft Ma	intenance of Equipment
	ablishing Blue Flag Protection ile switching was being done currently.
Occupation Car	rman (Car Inspector)
Age	Years
Length of Service	Years
Last Rules Training Jan	. 18, 1997
Last Safety Training Jan	. 18, 1997
Last Physical Examination July	y 20, 1979

Circumstances Prior to the Accident

The Carman reported for duty in the forwarding yard at 11:00 p.m., the evening prior to the accident, at NS's Brosnan Yard in Macon, Georgia. His regularly assigned shift was 7 a.m. to 3 p.m. He was working this shift in overtime status. The Mechanical Department Supervisor assigned him to the south end Blue Flag protection job and instructed him to go to the south end of the yard and leave the Blue Flag protection in place on Tracks Nos. 3 and 6 after the Train Crew of Train No. G-25 had completed its move on each of those two tracks. The Carman drove the company-owned truck southward on the East Levee Road to the south end of the forwarding yard, and upon arrival, parked the vehicle near a light pole. From the point at which he parked the truck, he had to cross Tracks Nos. 9, 8, and 7 to get to his Blue Flag assignment. Upon completing the Blue Flag requirements for Track No. 6, the Carman crossed over to the switch leading to Tracks Nos. 2 and 3. He stood beside the switch while he was waiting for the locomotives of Train No. G-25 to exit the south end of Track No. 3.

Train No. G-25

Train No. G-25 was a local freight train that originated in Savannah, Georgia at 7 p.m. on Jan. 18, 1997. The Crew comprised an Engineer and a Conductor who had completed their statutory off-duty periods prior to reporting for duty. This Train Crew performed local switching duties between Savannah and Macon, and arrived at Macon Junction at 3:55 a.m. on Jan. 19, 1997.

This train remained at Macon Junction until 5:50 a.m. when the Yardmaster in the North Tower at Brosnan Yard instructed his Crew to pull through Track No. 6, make a cut, and shove the remainder of the train onto Track No. 3.

The locomotives for Train No. M-98 were being backed onto Track No. 1, to couple to the train simultaneously as the Crew of Train No. G-25 was moving its train onto Track No. 3.

The Carman was last observed by the Conductor of Train No. G-25 standing west of the switch for Tracks Nos. 2 and 3, as the Conductor uncoupled the locomotives from the cars that remained on Track No. 3. The Carman and Conductor waved to each other at this time, and according to the Conductor, everything appeared to be normal. The locomotives for Train No. M-98 were moving northward on Track No. 1 during the time of the Conductor's observation.

Train No. M-98

Train No. M-98 was a southbound freight train originating at Macon on the day of the accident. The Crew of this train comprised an Engineer and a Conductor who had completed their statutory off-duty periods prior to reporting for duty. They went on duty at the engine terminal at 6 a.m. on Jan. 19, 1997. The train was assigned three locomotives, NW8067 (General Electric Model C-30-7), SOU3208 (Electro-Motive Division (EMD) Model SD-40-2), and NW6143 (EMD Model SD-40-2), coupled in multiple unit control, from south to north.

The Crew of this train received instructions to depart the engine terminal at 6:25 a.m. They proceeded southward on Thoroughfare No. 2 to the switch for the south crossover to the forwarding yard. When the locomotives arrived at the south end of the forwarding yard lead, the Yardmaster in the North Tower instructed the Crew to back onto Track No. 1 and couple to its train. This Crew was backing northward with the three light locomotives onto Track No. 1.

The tracks in the south yard extended northward and southward and were numbered One through Nine, beginning from Thoroughfare No. 2. The yard lighting in the area of the accident consisted of a single pole light, east of the accident area, and located between Track No. 9 and the East Levy Road.

The ambient temperature at the time of the accident was 28° F. No atmospheric condition limited visibility.

The Accident

As the Carman was standing near the switch between Tracks Nos. 2 and 3, waiting for the locomotives of Train No. G-25 to pull southward out of the track, the locomotives of Train No. M-98 were passing him, moving northward on Track No. 1. For an undetermined reason, the Carman apparently fouled Track No. 1 and was struck by the locomotives of Train No. M-98 as they moved northward. The body of the Carman was discovered by the Crew Members of Train No. G-09 as the train pulled southward out of Track No. 2 at approximately 6:55 a.m., and they notified the Main Tower of their discovery via radio. There were no eye witnesses to the accident.

The Bibb County Medical Center Emergency Medical Service (EMS) arrived at the accident site, and an EMS paramedic pronounced the Carman dead at 7:16 a.m. The cause of death was multiple blunt and crush injuries with the trunk of the body transected. The Bibb County Coroner declared the manner of death as an accident.

Please see the attached diagrams of Brosnan Yard to better visualize the accident scene and chain of events leading up to the fatality.

Post-Accident Investigation

The company truck assigned to the Carman for this tour of duty was found parked near the switches leading to the forwarding yard. The Carman had left his hard hat, safety glasses, and hand-held, battery-powered light on the seat of the truck. He was apparently attempting to perform his assigned duties while utilizing illumination supplied by the pole-mounted light in the yard near his location.

Re-enactment of the circumstances surrounding this accident revealed that it was dark when the accident occurred, and the Carman would have been dependent on the lighting generated from the pole-mounted light since he did not have his hand-held light with him. The re-enactment also demonstrated that if both train's locomotive consists were passing the switch to Tracks Nos. 2 and 3 at the same time, illumination from the pole-mounted light would have been diminished to the point that a person standing near the switch would have been in almost total darkness. The noise from both locomotive consists may have made it impossible to hear the audible warning (bell) from Train No. M-98.

The Carman was wearing layered clothing with a stocking-type cap and a hooded sweatshirt at the time of the accident. His outer clothing was dark in color. It is unknown if the stocking cap and hooded sweatshirt he was wearing at the time had reduced his ability to hear. He also had gloves and a radio with him. His gloves and radio were found in the gage of the track north of the point of impact. His transected body was found approximately 191 feet north of the switch to Tracks Nos. 2 and 3. His upper torso was found in the gage of Track No. 1, while his lower portion was found outside the gage of the east rail.

Toxicology samples were obtained from the deceased Carman, Engineer, and Conductor of Train No. M-98 and were tested under the authority of 49 CFR Part 219, Subpart C. Results of all tests were negative.

Evidence observed on Locomotive NW 6143 of Train No. M-98 indicated that it had passed over the Carman's body. The Engineer was operating from the control stand from the west side of the south unit (NW 8067). The locomotive consist was moving northward onto Track No. 1 to couple to its train. The Conductor was controlling the northward movement of the locomotives from the cab of Locomotive NW 6143; he was seated on the west side. The Conductor's view of the track in the direction of movement was hampered by the long hood end of Locomotive NW 6143.

There is conflicting information over whether the headlight was illuminated in the direction of movement. The Engineer of Train No. M-98 stated that he usually turned on the headlight at each end of the locomotive consist prior to departing the engine terminal. During an interview, he recalled not having to turn on the headlights because they were already illuminated. However, the Engineer and Conductor of Train No. G-25 stated that they did not observe an illuminated headlight on Train No. M-98's rear unit, nor did they hear the bell being sounded as they passed it. The investigation revealed that the Engineer on Train No. M-98 had been cited during a Safety Audit performed on Dec. 30, 1996 at Brosnan Yard for not having his locomotive headlight illuminated as required by Operating Rule No. 17.

Analysis of the speed/event recorder data removed from the locomotives indicated that Train No. M-98's locomotives made the reverse move onto Track No. 1 at approximately 6:40 a.m.

According to those with whom the deceased had worked during the night, the shift had been a routine tour until the Carman was given his last assigned flagging duty for the night. The majority of the mechanical force agreed that the Yardmasters in the towers habitually had attempted to notify all affected parties of yard movements whenever possible; however, no one could recall hearing a notification of this movement.

Additionally, the Carman was standing in darkness and did not have a hand-held light with him. Nor was he wearing any reflective equipment that would have enabled the Crew of Train M-98 to be aware of his presence. The sound from the locomotives of Train No. G-25 in close proximity to the Carman may have masked the sound of the approaching locomotives of Train M-98, leaving him unaware of their approach to his location.



